

Dated December 5, 2008

Reply to Office Action dated September 8, 2008

REMARKS

In the final Office Action dated September 8, 2008, claims 1, 2, 8, 9, 12-15, 17 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud, claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud and common knowledge, claims 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud and in further view of Cassidy, and claims 5-7, 10 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud in further view of Rocchitelli. With this Amendment, Applicants have amended claims 1 and 18 in response to a request by the Examiner, also placing the claims in better condition for appeal, as allowed by 37 CFR §1.116. After entry of this Amendment, claims 1-18 are pending in the Application.

Claims 1, 2, 8, 9, 12-15, 17 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud. Independent claims 1, 15 and 18 all recite in part a thermally conductive mass having (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet and (2) said heating means disposed between the first and second channels, the fluid flow path coupled in heat transfer relation to the heating means so that fluid in the fluid flow path absorbs heat from the thermally conductive mass, (3) the fluid flow path open to the exterior of the thermally conductive mass.

The Examiner has not made a *prima facie* case of obviousness. The Examiner in his rejection has not addressed three important structural limitations of claims 1, 15 and 18 - (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet, (2) said heating means disposed between the first and second channels and (3) the fluid flow path open to the exterior of the thermally conductive mass. The Examiner simply copies the claim language in his contention of what Gusmer teaches. However, the Examiner does not indicate where Gusmer discloses any of these three elements or where Bochud discloses these three elements. The Examiner must provide the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate to establish an obviousness rejection. MPEP 706.02(j).

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Gusmer teaches a heat exchanger comprising a pair of metal heater blocks 1. Each heater block has a fluid inlet 9 and a fluid outlet 11. Grooves 7 all communicate at one end with the liquid inlet 9 and at the other end with the liquid outlet 11. (Col. 2, lines 4-8). In other words, fluid enters the inlet and is divided into the grooves, which run parallel and across the block, where the fluid joins to exit the outlet. Gusman does not teach (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet and (2) said heating means disposed between the first and second channels. Gusman teaches a fluid flow path wherein the fluid is separated to travel a short distance on one side of the heating element. Applicants' heater discloses a fluid flow path wherein the fluid enters a first channel that runs along one side of the heating element and then enters the second channel that runs along another side of the heating element. The fluid does not exit the mass as it travels through the first and second channels. The same fluid passes through a substantially longer path on two sides of the heating element for more efficient heating.

The Examiner contends that Bochud discloses insert molding a heater in a thermally conductive body to surround the heating element. The Examiner also contends it would be obvious to secure the heater to locate the heater within the mass. However, the Examiner again fails to point out where Bochud teaches (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet, (2) said heating means disposed between the first and second channels and (3) the fluid flow path open to the exterior of the thermally conductive mass. Bochud discloses die cast aluminum entirely surrounding the heating bodies 2, 3. Bochud further discloses a stainless steel receptacle 7 which the water enters to be heated by the heating bodies 2, 3. As clearly seen in the figures of Bochud, there is no fluid flow path having first and second channels, and no fluid flow path open to the exterior of the mass. The heating means is disposed on one side of the receptacle rather than in between channels. Water enters the receptacle and steam exits.

Neither Gusman nor Bochud teach (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet, (2) said heating means disposed between the first and second channels and (3) the fluid flow path open to the exterior of the thermally conductive mass. This structure disclosed in the independent claims is important to the efficiency of the heater. The Examiner has not shown any reference that teaches, discloses or renders obvious these three structural elements of claims 1, 15 and 18

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and has therefore failed to make a *prima facie* case of obviousness. Applicants respectfully submit that claims 1, 15 and 18 are in condition for allowance, notice of which is requested.

Claims 2, 8, 9, 12-14 and 17 depend either directly or indirectly from independent claims 1 and 15 to include all of the limitations therein. For at least this reason, claims 2, 8, 9, 12-14 and 17 are in condition for allowance, notice of which is requested.

Claim 16 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud and common knowledge. Claim 16 depends from claim 15 to include all of the limitations therein. For at least this reason, claim 16 is in condition for allowance, notice of which is requested.

Claims 3 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud and in further view of Cassidy. Cassidy fails to teach, disclose or render obvious (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet, (2) said heating means disposed between the first and second channels and (3) the fluid flow path open to the exterior of the thermally conductive mass. Cassidy teaches one channel between an inlet and an outlet between two heaters. Claims 3 and 5 depend from claim 1 to include all of the limitations therein. For at least this reason, claims 3 and 5 are in condition for allowance, notice of which is requested.

Claims 5-7, 10 and 11 are rejected under 35 U.S.C. §103(a) as being unpatentable over Gusmer in view of Bochud in further view of Rocchitelli. Rocchitelli fails to teach, disclose or render obvious (1) a fluid flow path including a first and second channel formed therein between an inlet and an outlet, (2) said heating means disposed between the first and second channels and (3) the fluid flow path open to the exterior of the thermally conductive mass. Rocchitelli discloses a flat thermistor on one side of the fluid path. Claims 5-7, 10 and 11 depend from claim 1 to include all of the limitations therein. For at least this reason, claims 5-7, 10 and 11 are in condition for allowance, notice of which is requested.

It is submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment

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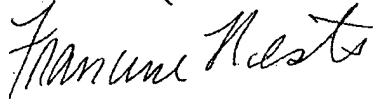
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does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicant's attorney at the telephone number listed below.

Respectfully submitted,



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